

## Patent Abstracts of Japan

PUBLICATION NUMBER

09245994

**PUBLICATION DATE** 

19-09-97

APPLICATION DATE

08-03-96

APPLICATION NUMBER

08051432

APPLICANT: NAGANO KEIKI SEISAKUSHO LTD;

INVENTOR:

NAGASAKA HIROSHI;

INT.CL.

H05H 1/46 C23F 4/00 H01L 21/205

H01L 21/3065

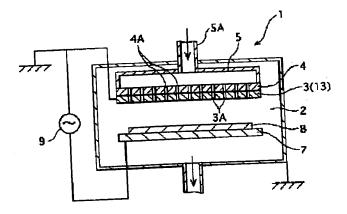
TITLE

ELECTRODE FOR PROCESSING

DEVICE UTILIZING PLASMA, AND

MANUFACTURE OF SAME

ELECTRODE



ABSTRACT: PROBLEM TO BE SOLVED: To provide an electrode for a processing device utilizing plasma, and a manufacturing method of the electrode which is of a long service life and low cost, and in which generation of particles and metal contamination are less

SOLUTION: An upper electrode 3 disposed at an upper part of a reaction chamber 2 in a parallel flat plate type plasma etching device 1 is formed of a main component of silicone including an electric resistance lowering element. A specific resistance of the upper electrode 3 is set at  $0.1\Omega.\text{cm-a}$  value in which the element is included by solution limit quantity. In the upper electrode 3, a number of gas supply small holes 3A of a diameter of 0.5mm are bored by an electric discharge machine, and a heat affected layer generated by processing is eliminated by chemical etching.

COPYRIGHT: (C)1997,JPO